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Item 5 of the provisional agenda
Regulations Nos. 24 (Visible pollutants, measurement of power of C.I. engines (Diesel smoke)), 85 (Measurement of the net power), 115 (LPG and CNG retrofit systems), 133 (Recyclability of motor vehicles) and 143 (Heavy Duty Dual-Fuel Engine Retrofit Systems (HDDF-ERS))

Proposal for amendments to UN Regulation No. 24 (Visible pollutants, measurement of power of Compression Ignition engine (Diesel smoke))

Submitted by the expert from the International Organization of Motor Vehicle Manufacturers*

The text reproduced below was prepared by the expert from the International Organization of Motor Vehicle Manufacturers (OICA) to align the provisions of the 03 series of amendments to UN Regulation No. 24 with UN Regulation No. 85. The modifications to the current text of the Regulation are marked in bold for new or strikethrough for deleted characters.

* In accordance with the programme of work of the Inland Transport Committee for 2018–2019 (ECE/TRANS/274, para. 123 and ECE/TRANS/2018/21 and Add.1, Cluster 3), the World Forum will develop, harmonize and update Regulations in order to enhance the performance of vehicles. The present document is submitted in conformity with that mandate.

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I. Proposal

Annex 4, paragraph 3.2., amend to read:

"3.2. Fuel

The **fuel used shall be the one available on the market. In any case of dispute, the** fuel shall be the reference fuel whose specifications are given in Annex 6 to this Regulation."

Insert new paragraph 3.3.3.:

"3.3.3. When a turbo-charged engine is fitted with a system which allows compensating the ambient conditions temperature and altitude, at the request of the manufacturer, the correction factor α_a or α_d shall be set to the value of 1."

Annex 10, insert new paragraph 6.4.3.:

"6.4.3. When a turbo-charged engine is fitted with a system which allows compensating the ambient conditions temperature and altitude, at the request of the manufacturer, the correction factor α_a or α_d shall be set to the value of 1."

II. Justification

1. Annex 4 of Regulation No. 24 describes the opacity test over the full load curve of a compression ignition engine. For the determination of the engine power the same correction factors are applied as in UN Regulation No. 85. However, the paragraph mentioned above is missing in UN Regulation No. 24. Therefore it is not possible to use this paragraph for compression ignition engines, because for the opacity test at full load it cannot be applied. UN Regulation No. 24 should be adjusted to harmonize both Regulations.

2. The requirement to use reference fuel in UN Regulation No. 24 leads to an unjustified test additional to that in UN Regulation No. 85. This requirement should therefore be harmonized.